immuno biology 6

THE IMMUNE SYSTEM IN HEALTH AND DISEASE

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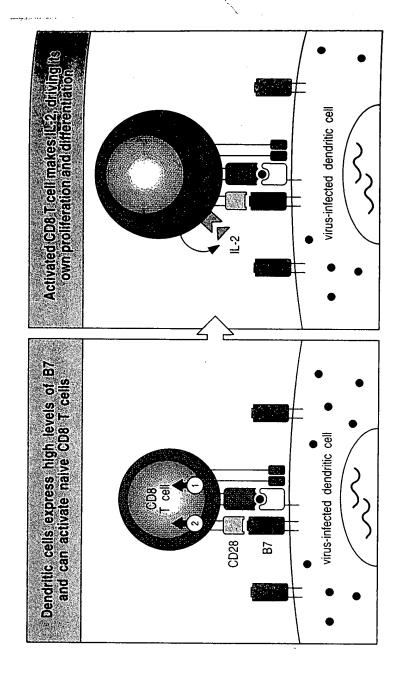
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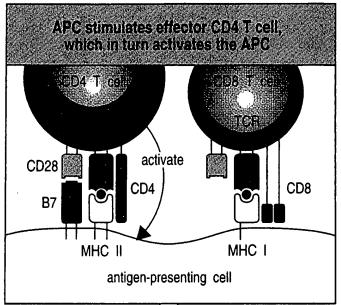
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Fig. 8.25 Naive CD8 T cells can be activated directly by potent antigen-presenting cells. Naive CD8 T cells that encounter peptide:MHC class I complexes on the surface of dendritic cells, which express high levels of costimulatory molecules (left panel), are activated to produce IL-2 (right panel) and proliferate in response to it, eventually differentiating into armed cytotoxic CD8 T cells (not shown).



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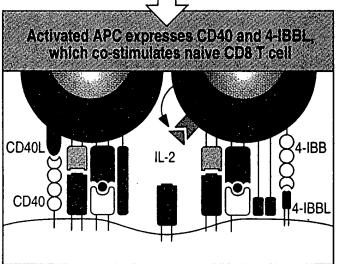


Fig. 8.26 Some CD8 T-cell responses require CD4 T cells. CD8 T cells recognizing antigen on weakly costimulating cells may become activated only in the presence of CD4 T cells bound to the same antigen-presenting cell. This happens mainly by an effector CD4 T cell recognizing antigen on the antigen-presenting cell and being triggered to induce increased levels of co-stimulatory activity on the antigen-presenting cell, which in turn activates the CD8 T cell to make its own IL-2.